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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,545	07/09/2003	Bernd Heigl	DT-6563	2804
30377	7590	09/30/2004	EXAMINER	
DAVID TOREN, ESQ. SIDLEY, AUSTIN, BROWN & WOOD, LLP 787 SEVENTH AVENUE NEW YORK, NY 10019-6018			TIBBITS, PIA FLORENCE	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,545

Applicant(s)

HEIGL ET AL.

Examiner

Pia F Tibbits

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
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Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the conventional names, as described in the specification, e.g. charging station, charging housing, charger electronics, battery, air blower, etc. for the elements shown in the figure with non-conventional symbols. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the upper section must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

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amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The specification has not been checked to the extent necessary to determine the presence of all possible errors. Applicant's cooperation is requested in correcting any errors in the specification of which applicant may become aware.

5. The entire disclosure, i.e., specification, abstract and claims should be revised carefully to correct all grammatical and idiomatic errors. For example:

a) " an air volume (V) at cooling temperature CT is moved past heat-transferringly into/onto the battery" in the abstract,

b) " the charger electronics (2) is heat-transfer arranged" in claim 1.

c) " the charger electronics of the charging station also heat up significantly due to the transformation of the high output" in the specification.

Depending on the number of changes made to the entire disclosure to correct the grammatical and idiomatic errors, it may be more efficient to file a substitute specification in accordance with MPEP 608.01(q). If applicant decides to do so, the substitute specification filed must be accompanied by a statement that it contains no new matter. Such statement must be a verified statement if made by a person not registered to practice before the Office.

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6. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter: "upper section". See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1: the statement "A charging station for a rechargeable battery (5) that can be physically and electrically connected to the battery (5) having charger electronics (2) in a charger housing (3)" is confusing since the charger is "physically and electrically connected to the battery", the charging station is the combination of charger and battery.

Claim 5: "a pressure chamber having low flow resistance being arranged between the air blower and the air inlet points" is not clear since a "pressure chamber" would have to be sealed, and pressurized?

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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11. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by **JP-08185898** [hereinafter JP].

The statement "the charger electronics (168) is heat-transfer arranged in the air current (L)" was interpreted to mean that the charger electronics are cooled by the air current.

The statement "one air vent is associated with the physical contact interface of the battery" was interpreted to mean that the battery is cooled by the air current.

JP discloses in the abstract and figures 1-6 a charger 25 for a rechargeable battery (18) that can be physically and electrically connected to the battery (18) in a charger housing (10), wherein an air blower (24) is arranged in the charger housing (10) for producing an air current (L) through two air vents (22,24).

With regard to the limitation of having charger electronics to monitor the charging of the battery: it is an inherent function of the charger controller to have charger electronics to continuously monitor the charging of the battery, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

With regard to the limitation of having an electrical and physical contact interface for the battery in the charger electronics: it is an inherent function of the charger controller to have an electrical and physical contact interface for the charging of the battery, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

With regard to the limitation of having air vent (22) associated with the physical contact interface of the battery: it is an inherent function of the charger disclosed by JP to cool the battery during charging, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moore, Jr. et al.**

[hereinafter Moore][6455186] in view of **Nishikawa et al.** [hereinafter Nishikawa][6597572].

Moore discloses in figures 1-15 a charger 180 for a rechargeable battery (26) that can be physically and electrically connected to the battery (26) having charger electronics (168) in a charger housing (164) and an electrical and physical contact interface (150) for the battery (26), wherein an air blower (182) is arranged in the charger housing (164) for producing an air current (L) through two air vents (184, 186) to cool the battery. [see also column 5, lines 8-15; column 7, lines 6-17 and 35-47]. Moore does not disclose the charger electronics (168) being cooled by the air current (L).

Nishikawa discloses in figures 2-4 a charger housing 7 including fan 1 to dissipate heat from the charger electronics/circuit components contained within [see also column 1, lines 45-60]. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to make integral the cooling for the charger and the battery in order to dissipate heat for the charger components as well, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routing skill in the art. **Howard v. Detroit Stove Works**, 150 U.S. 164 (1893).

As to claim 2, see remarks for claim 1.

As to claim 3, the air blower being arranged between the air vent on a flow inlet side and the charger electronics, absent any criticality, is only considered to be an obvious modification as it has been held by the courts that there would be no invention in shifting the location of a structure of a device to another location if the operation of the device would not thereby be modified. **In re Japikse**, 86 USPQ 70.

As to claim 4, the air vent on the flow inlet side forms a plurality of surface-distributed air inlet points each associated with cooling vents of the battery: Moore discloses a plurality of surface-

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distributed air inlet points each cooling vents the battery [see also fig.1; column 4, lines 55-67; column 5, lines 1-7].

As to claim 5, as best as it can be understood at this time, having low flow resistance being arranged between the air blower and the air inlet points, it is an inherent function of the charger disclosed by Moores and Nishikawa since fluid air has low flow resistance, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

As to claim 6, the air vent on the flow inlet side being arranged in an upper section of the charging station, absent any criticality, is only considered to be an obvious modification as it has been held by the courts that there would be no invention in shifting the location of a structure of a device to another location if the operation of the device would not thereby be modified. *In re Japikse*, 86 USPQ 70.

With respect to the process claim 7: the process steps will be met during the normal operation of the apparatus described above.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus.

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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is (571) 272-2086. If unavailable, contact the Supervisory Patent Examiner Mike Sherry whose telephone number is (571) 272-2084. The Technology Center Fax number is (703) 872-9306.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFT

February 3, 2004

Pia Tibbits

Primary Patent Examiner

